MISSISSIPPI SUPREME COURT

JEFFREY HAVARD,

Plaintiff

v.

Case No. 2003-DP-00457-SCT

STATE OF MISSISSIPPI,

Defendant.

AFFIDAVIT OF DR. GEORGE NICHOLS

George Nichols, being duly sworn states as follows:

- 1. Background. I have attached a copy of my CV.
- 2. I have been informed that at Jeffrey Havard's trial for the death of Chloe Britt in Adams County Circuit Court, the State presented medical experts who concluded that the infant victim's death was caused by "Shaken Infant Syndrome." They based this conclusion on the presence of brain hemorrhages and retinal hemorrhages. Furthermore, the State's medical experts concluded that the injury was inflicted in the hour before Chloe began showing symptoms, which meant the injury occurred while Chloe was in Mr. Havard's care.
- 3. After Mr. Havard was convicted of capital murder, at Mr. Havard's request, I reviewed the following documents concerning the medical evidence used against him:
 - a. Birth records for Chloe Britt;
 - b. Well Baby visits and pediatric records for Chloe Britt from Dr. Dar;
 - c. Medical records on Chloe from the Natchez Community Hospital;
 - d. Autopsy report completed by Dr. Stephen Hayne on February 22, 2002;
 - e. Trial testimony of Dr. Ayesha Dar, Dr. Stephen Hayne, and Dr. Laurie Patterson;
 - f. Photos from the autopsy of Chloe Britt.
- 4. In my opinion, Chloe Britt's death is entirely consistent with a short fall, and not an abusive shaking. At the time of Mr. Havard's trial, many medical experts in the world likely would have agreed with the State's medical expert, Dr. Hayne, that Chloe's death was caused by Shaken Baby/Impact Syndrome. This concurrence was likely despite the fact that Chloe displayed only two symptoms

EXHIBIT

of shaken baby syndrome: retinal hemorrhaging and subdural hematoma. At the time, an infant who presented with subdural hematomas and retinal hemorrhages (without a history of motor vehicle accidents or a fall from an appreciable height) was likely to lead to the medical conclusion of intentional abuse—Shaken Baby/Impact Syndrome.

- 5. There has been considerable new medical literature since Mr. Havard's trial that subdural hematomas and retinal hemorrhages are not necessarily indicative of abusive shaking; indeed, with only these two symptoms, the classic triad of Shaken baby Syndrome is not fully established. Significant research papers published in prestigious medical journals in the United States and other western countries cast serious doubt on the conclusions that retinal hemorrhages and subdural hematomas in infants are specific signs of vigorous shaking, research which continues to the present day.
- 6. In the years since Mr. Havard's trial, the medical community has begun to accept a number of alternative explanations that can account for deaths that would previously have been attributed to "shaken baby syndrome." Some of these underlying medical conditions that can provide an alternative explanation for sudden death include: chronic subdural hematomas, hydrocephalus (an abnormally increased cavity deep in the brain resulting in loss of brain substance and caused by blockage of the normal fluid circulation that occurs in and around the brain), coagulopathies (disorders of the blood clotting mechanism that result in continuing or uncontrolled bleeding), thrombocytopenia (decrease in a normal cellular component of the blood that promotes sealing off of leaking blood vessels), various infections, and a number of inherited abnormalities of brain chemistry, as well as simple impact trauma.
- 7. At the time of Mr. Havard's trial, many physicians, would probably have agreed that the injuries that caused Chloe's death were inflicted within minutes of the time that Chloe was found close to death. I have changed my mind since Mr. Havard's trial in 2002, and now I believe that it is certainly possible that Chloe could have appeared lucid after the injury.
- 8. Numerous scientific journal articles have now established that children with intracranial hemorrhage (bleeding within the head) may show a wide range of presenting symptoms. Some show these symptoms within minutes while others may take hours to manifest these symptoms of intracranial pathology. Numerous cases have been recorded in the literature in which children showed a lucid interval. It is accepted that adults can experience lucid intervals after an intracranial hemorrhage and there is no scientific reason to believe that children are different in this regard. If this were not true, then why do pediatric emergency departments hand out post-care instructions to parents and caregivers after head injury. Most of the studies and cases concluding that lucid intervals may occur did not exist at the time of Mr. Havard's trial in December 2002.
- 9. At Mr. Havard's trial, the State's medical expert testified that Chloe's injuries must have been caused by intentional force equivalent to the force of a motor

vehicle accident or a fall from a significant height. It is now generally agreed by most forensic pathologists and biomechanical scientists and engineers that such comparisons are without scientific merit and should not be made. Falls are random events and it is now generally accepted that some long distance falls do not cause severe injury while other shorter distance falls may cause significant injury and death. It is further now understood that while most short distance falls do not lead to serious injuries, a subset of short distance falls result in skull fractures and lethal intracranial hemorrhage.

10. In the years since Mr. Havard's trial, new developments have caused the legal and medical communities of England, Australia, Canada, and New Zealand, the courts in the states of Kentucky, Wisconsin, New Mexico, Arizona, and California, and even the United States Supreme Court, to reconsider diagnoses of intentional abuse.

George Nichols M.D.

Subscribed and sworn to before

me this 11th day of November 2013 Thomas O Nichols

NOTARY PUBLIC, STATE OF KENTUCKY

My commission expires May 4, 2016.

CURRICULUM VITAE

George R. Nichols II, M.D.

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Louisville, Kentucky 40206

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Date and Place

Of Birth: November 22, 1946

Louisville, Kentucky

Married – Janell Seeger, M.D.

Children: Ian, Dillon and Jordan

Education:

1964 – 1968 University of Louisville

Louisville, Kentucky

Degree: B.A. – American History

1968 - 1972

University of Louisville

Degree: M.D.

School of Medicine

Residency

1972 - 1976

Anatomic and Clinical Pathology

University of Louisville Affiliated Hospitals Louisville, Kentucky

Fellowship

1976 – 1977

Forensic Pathology

Institute of Forensic Medicine Toxicology and Criminalistics

Cincinnati, Ohio

Certification

1977 American Board of Pathology, Anatomic & Clinical

Pathology

1978 American Board of Pathology, Forensic Pathology

Licensure

1973 Kentucky # 16801 1976 Ohio #39388

1987 Indiana # 01036519 (Lapsed as of 06/30/2003)

ACADEMIC APPOINTMENTS

1974 – 1976 Pathology Instructor (Teaching Resident)

University of Louisville School of Medicine

1977 – 1978 Instructor

Department of Pathology University of Louisville School of Medicine

1978 – 1983 Assistant Clinical Professor

Department of Pathology University of Louisville School of Medicine

1979 – 1985 Associate Member

Department of Toxicology & Pharmacology

University of Louisville School of Medicine

1981 – 1982 Instructor

National College of District Attorney

Houston, Texas

1983 – 1991 Associate Clinical Professor

Department of Pathology University of Louisville School of Medicine

1981 – 1997 Section Chief, Forensic Pathology

and Director of Forensic Pathology Training

Department of Pathology University of Louisville School of Medicine

1997 – Aug 1, 2002 Director, Clinical Forensic Medicine

Department of Pathology University of Louisville School of Medicine

1991 – Present Clinical Professor

Section of Forensic Pathology And Clinical Forensic Medicine

Department of Pathology University of Louisville School of Medicine

1996 – Present Clinical Associate Professor

Department of Pediatrics University of Louisville School of Medicine

Academic Address: Division of Forensic Pathology

University of Louisville 810 Barret Avenue – 7th Floor Louisville, Kentucky 40204

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E- mail: REAPERGRN@AOL.COM

Non-Academic Appointments

1974 Fellow, American Cancer Society

1975 –1976 Chief Resident

Department of Pathology University of Louisville School of Medicine 1976 – 1977 Deputy Coroner

Hamilton County, Ohio

1977 – 1997 Chief Medical Examiner

Commonwealth of Kentucky Retired September 1, 1997

1977 – 2005 Medical Director of Laboratories

International Clinical Laboratories Smith Kline Clinical Laboratory

Smith Kline Beecham Clinical Laboratories

Quest Diagnostics

1983 – 2006 President and Medical Director

Laboratory Physicians, Inc.

2307 Greene Way

Louisville, Kentucky 40220

(502) 491-3484

Sept. 1997-Dec 31, 1997 Consulting Forensic Pathologist

Office of the Chief Medical Examiner

Louisville, Kentucky

1997-Present President

Commonwealth Medical Legal Services, Inc.

Brownsboro Office Park

6013 Brownsboro Park Boulevard, Suite D

Louisville, Kentucky 40207

(502) 899-9837

1998-2004 Medical Consultant

Attorney General

Commonwealth of Kentucky Medicaid Fraud and Abuse Unit

1999-2005 Consultant in Laboratory Medicine

AdminaStar of Kentucky

(Medicare carrier) 9001 Linn Station Road Louisville, KY 40223

Memberships

1972 – 1976 House Staff Association

University of Louisville Affiliated Hospitals

President, 1974-75

1974 – 1975	Board of Governors Louisville General Hospital
1974 – Present	Jefferson County Medical Society
1974 – Present	Kentucky Medical Association Board of Delegates – 1975-79 Committee on Community and Rural Health – 1984-86
1976 – Present	American Society of Clinical Pathologists Fellow – 1980
1976 – Present	National Association of Medical Examiner Board of Directors 1982 – 1992, 1994 – 1995
1977 – Present	Kentucky Society of Pathologists President - 1983
1977 – Present	American Academy of Forensic Sciences Fellow – 1991
1983 – 1988	Board of Directors Kentucky Alliance for Exploited and Missing Children
1983 – Present	American Association of Clinical Anatomists
1984 – 1985	Commission Member, Kentucky State Child Sexual Abuse and Exploitation Prevention Board
1987 – 1995	Board of Directors Children First
and 1998 – Present	Louisville, Kentucky
1990 – Present	College of American Pathologists – Fellow 1990
1991 – Present	Association for Advancement of Automotive Medicine
1996-2003	Jefferson County Task Force to Prevent Domestic Violence Chairman, Domestic Violence Fatality Review Committee

AWARDS

1977	Outstanding Accomplishment in Medical-Legal Issues. Louisville Bar Association
1987 and 1991	Kentucky Attorney General's Certificate of Merit
1990	Individual Achievement Award, Kentucky Organ Donor Affiliates
1993	Outstanding Victim Advocacy, Kentucky Victim's Coalition
1993	Protect A Life Award, Office of Kentucky State Fire Marshall
1995	Silver "Telly" Award, Educational Video Foundation
1995	Vision Award, International Association of Forensic Nurses
1996	Certificate of Appreciation, Kentucky Coalition Against Rape and Sexual Assault
1996	Distinguished Alumnus Award, Alumni Association, School of Medicine, University of Louisville
1997	"The Wolf Award", in recognition of outstanding service in the Coroner/Medical Examiner program. Coroner's Association of Kentucky
1997	Ambassador for the Visually Impaired award presented by the Kentucky Lions Eye Foundation, Inc., the University of Louisville Ophthalmology & Visual Science and University of Louisville Lions Eye Bank
1997	Clinical Forensic Medicine Leadership Award Presented at the Fourth Annual Postgraduate Clinical Forensic Medicine Conference Louisville, Kentucky
1998	Outstanding Crime Victim Advocacy Presented by the Kentucky Victims' Coalition (KVC)

1998 R. Dietz Wolfe Medical Educator Award

Presented by the Louisville Consortium for Medical

Education

Hospital Appointments:

1977 - 1983 Staff Pathologist

Louisville General Hospital

Louisville, Kentucky

1983-2008 Staff Pathologist

University of Louisville Hospital

Louisville, Kentucky

1993 – 1995 Consultant in Pediatric Pathology

Department of Pathology Kosair Children's Hospital Louisville, Kentucky

1986-1992 Director of Autopsy Service

Department of Pathology

University of Louisville Hospital

Louisville, Kentucky

1988 – 1995 Consultant in Laboratory Medicine

Department of Pathology

Louisville Veterans Administration Medical Center

Louisville, Kentucky

1995 – 2007 Active Staff

Department of Pathology Kosair Children's Hospital Louisville, Kentucky

2008 – Present Emeritus Staff

Department of Pathology Kosair Children's Hospital Louisville, Kentucky

2008 – 2009 Courtesy Staff

University of Louisville Hospital

Louisville, Kentucky

HONORS

1992

Alpha Omega Alpha, Honor Medical Society

FIELD OF SPECIFIC INTEREST

Mass Fatality Management, Hospital Associated Disorders, Medical Device Related Morbidity and Mortality, Child Abuse, Domestic Violence, Occupational Disorders, Clinical Forensic Medicine. Medical Negligence, Causation Determination.

SPEECHES AND INVITED LECTURESHIPS

Too numerous to list

RESEARCH

Living Forensic Pathology Program, Grant No. 5601-N15A-02/95

Practice Application of Infrared Videography in Victims of Violent Crime, UHSC#117-94, 1994, \$200,143

Infrared Videography Grant #5210-N15A-1/95, 1995, \$179,125

PUBLICATIONS

Tobin GR, Schustermann M, Peterson GH, and **Nichols GR**; "Intramuscular neurovascular anatomy of the latissimus dorsi muscle: The basis for splitting the flap." Surgical Forum, 31, (1980)

Alberhasky M, **Nichols GR**; "Fatal Hemorrhage From Minor Trauma Following Massive Salicylate Ingestion" American J of Forensic Medicine and Pathology, Vol 5, (1984)

Weems C, Olson Wm, and **Nichols GR**; "Risk Factors for Death During a Heat Wave", J of the Kentucky Medical Association, Vol. 83, Number 9, (1985)

Nichols GR, Whitesel JL, ,Hahn W, and Barrows GH; "Evaluation of a Routine Automated Alcohol Dehydrogenase Method", American J Clinical Pathology, Vol 86, No. 3 (1986)

Beers GJ, Nichols GR, and Willing SJ; "CT Demonstration of Fat Embolism-Associated Hemorrhage in the Anterior Commisure", American J of Neuroradiology, Vol 9, No 1 (1988)

Smock WS, Fuller PM, Huellcle DF and **Nichols GR**, "Basilar Skull Fractures Without Cranial Vault Impacts". Proceedings of the Thirty-Second STAPP Car Crash Conference, Atlanta, Georgia (1988)

Nichols GR, Davis GJ and Lefkowitz JB; "Sudden Death Due to Fibromuscular Dysplasia of the Sinoatrial Nodal Artery". J of the Kentucky Medical Association, Vol 87 (1989)

Smock WS, **Nichols GR**, Fuller PM and Weakley-Jones BA; "The Forensic Pathologist and the Determination of Driver vs. Passenger in Motor Vehicle Collisions". American J of Forensic Medicine and Pathology, Vol 10, (1989)

Nichols GR, Davis GJ, and Corey TS; "In the Shadow of The Baron: Sudden Death Due to Munchausen Syndrome:, American J of Emergency Medicine, Vol 8 (1990)

Nichols GR, Corey TS, and Davis GJ; "Case Report: Nonfracture Associated Fatal Fat Embolism in a Case of Child Abuse", J of Forensic Sciences, Vol 35 (1990)

Farrow JR, Davis GJ, Roy TM, McCloud LC, and **Nichols GR**; "Fetal Death Due to Nonlethal Maternal Carbon Monoxide Poisoning", J of Forensic Sciences, Vol 35 (1990)

Nichols GR, Davis GJ, Corrigan CA, and Ransdell JS; "Death Associated with Abuse of a designer Drug", J of the Kentucky Medical Association, Vol 88 (1990)

Davis GJ, McCloud LC, **Nichols GR**, "Cerebral Tissue Pulmonary Embolization Due to Head Trauma", J of Forensic Sciences, Vol 36, (1991)

Corey TS, **Nichols GR**, Weakley-Jones B., Theuer HH. Unnatural deaths in nursing home patients. J for Sci 37(1):222-227. Jan 1992

Nichols GR, and Davis GJ; "Body Packing With a Twist: Death of a Salesman", American J of Forensic Medicine and Pathology Vol 13, (1992)

Nichols GR, Davis J, Parolla AJ; "Dirty Diving: Sudden Death of a Scuba Diver in a Water Treatment Facility". American J Forensic Med Pathol. 1992

Corey TS, McCloud LC, **Nichols GR**, and Buchino JJ; "Infant Death Due to Unintentioned Injury; American J of Diseases of Children, Vol 146 (1992)

Smock WS, **Nichols GR**, and Fuller PM, "Development and Implementation of the First Clinical Forensic Training Program, J of Forensic Sciences, Vol 38 (1993)

Handy TC, **Nichols GR**, Buchino JJ. A pediatric forensic medicine program. In Dimmick JE, Singer DB (eds): Forensic Aspects in Pathology. Perspectives in Pediatric Pathology. Basel, Karer. Vol 19:87-95, 1995

Handy TC, **Nichols GR**, Smock WS. Repeat visitors to a pediatric forensic medicine program. J for Sci 41(5): 841-844. September 1996

Mudd KL, Hunt A, Matherly RC, Goldsmith LJ, Campbell FR, **Nichols GR**, Rink RD; "Analysis of Pulmonary Fat Embolism in Blunt Force Fatalities", J of Trauma, Vol. 48, Number 4, (2000)

Beers GJ, Raque GH, Wagner GG, Shields CB, **Nichols GR 2nd**, Johnson JR, Meyer JE. "MR Imaging in Acute Cervical Spine Trauma", Journal of Computer Assisted Tomography, Vol. 12, Issue 5, pg 755-761, 1988

BOOK CHAPTERS

Nichols GR. Investigation of Church Bus Collision with Fire and Mass Fatalities. Proceedings of the International Symposium on the Forensic Aspects of Mass Disaster and Crime Scene Reconstruction. U.S. Government Printing House, 1990.

Handy TC, **Nichols GR**, and Buchino JJ; A Pediatric Medicine Program in Dimmeck JE, Singer DB (eds): Forensic Aspects in Pathology. Perspect Pediatric Pathology. Basel, Derger, 1995.